


REMARKS

Claims 1-17 are active in the present application. Claims 15-17 are new claims. Support for the new claims is found in the original claims. Claims 1-14 have been amended for clarity and to remove multiple dependencies. No new matter is added. An action on the merits and allowance of claims is solicited.

Respectfully submitted,

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IN THE TITLE

Please delete the title and replace with the following title:

[PROCESS FOR PRODUCING SCRATCH-RESISTANT WEATHERING-STABLE COATINGS]

--METHOD FOR PRODUCING SCRATCH RESISTANT, WEATHERPROOF COATINGS--

IN THE CLAIMS

Please amend the claims as follows.

--1. (Amended) A process for producing a scratch-resistant [coatings] coating, [which comprises] said process comprising:

applying at least one UV-curable coating composition comprising [as its photochemically crosslinkable constituent] a mixture of at least one aliphatic urethane (meth)acrylate prepolymer PU having at least two double bonds per molecule and having a viscosity in the range from 250 to 11,000 mPa·s, and at least one reactive diluent, to [the] a target substrate to form a wet coating and

curing [the resulting] said wet coating by exposure to ultraviolet radiation under an inert gas atmosphere.

2. (Amended) [A] The process as claimed in claim 1, wherein said UV-curable coating composition further comprises at least one reactive diluent R selected from the group consisting of difunctional [and] esters of acrylic acid, difunctional esters of methacrylic acid,

polyfunctional esters of ~~methacrylic acid, polyfunctional esters of acrylic acid with~~ [acrylic acid, and/or methacrylic acid with] aliphatic diols, [or] ~~aliphatic polyols and mixtures thereof.~~

3. (Amended) [A] ~~The~~ process as claimed in claim 1 [or 2], wherein, based on [the] ~~an~~ overall weight of the coating composition, excluding pigments and fillers, [said] ~~the~~ coating composition comprises:

5 - 90% by weight of at least one aliphatic urethane (meth)acrylate prepolymer PU;

10 - 95% by weight of at least one reactive diluent R;

0.1 - 5% by weight of at least one photoinitiator; and[, if desired,]

optionally 0 - 20% by weight of one or more further reactive diluents, and

optionally 0 - 15% by weight[, preferably 2 - 9% by weight,] of one or more additives [customary for coating compositions].

4. (Amended) [A] ~~The~~ process as claimed in [any of the preceding claims] claim 1, wherein [said] ~~the~~ urethane (meth)acrylate prepolymer PU has a number-average molecular weight in the range from 500 to 5000.

5. (Amended) [A] ~~The~~ process as claimed in [any of the preceding claims] claim 1, wherein [said] ~~the~~ urethane (meth)acrylate prepolymer PU has a double bond equivalent weight in the range from 250 to 2000[, preferably from 300 to 900 daltons].

6. (Amended) [A] ~~The~~ process as claimed in [any of the preceding claims] claim 1, wherein [said] ~~the~~ urethane (meth)acrylate prepolymer PU is [obtainable] obtained by successive reaction of at least 25% of [the] one or more isocyanate groups of a compound (component A) containing one or more isocyanate groups with at least one hydroxyalkyl ester of acrylic acid, [and/or] methacrylic acid [(component B)], or a mixture thereof (component B) and of any remaining free isocyanate groups with at least one further compound

(component C) having at least one functional group which is reactive toward isocyanate groups.

7. (Amended) [A] ~~The~~ process as claimed in claim 6, wherein component A is a prepolymer which contains a plurality of isocyanate groups and has at least two isocyanate groups per molecule, [obtainable] component A obtained by reacting at least one low molecular mass aliphatic diisocyanate or polyisocyanate with a compound having at least two isocyanate-reactive functional groups, [the] a ratio of isocyanate groups to functional groups [being] in the range of from 3:1 to 1:2.

8. (Amended) [A] ~~The~~ process as claimed in claim 6 [or 7], wherein the one or more isocyanate groups of component A have been reacted in a stoichiometric ratio with [the OH] one or more hydroxyl groups of component B.

9. (Amended) [A] ~~The~~ process as claimed in claim 6 [or 7], wherein at least [some] a portion of the free isocyanate groups of the urethane (meth)acrylate prepolymer PU have been reacted with one or more molecules which contain an isocyanate-reactive group and a hydrophilic, stabilizing group.

10. (Amended) [A] ~~The~~ process as claimed in claim 6 [or 7], wherein at least [some] a portion of the free isocyanate groups of the urethane (meth)acrylate prepolymer PU have been reacted with hydroxyalkyl esters of aliphatic dicarboxylic acids, [and/or] alkylamine amides of aliphatic dicarboxylic acids or mixtures thereof, having at least 6 carbon atoms.

11. (Amended) [A] ~~The~~ process as claimed in [any of the preceding claims] claim 1, wherein the coating composition [contains] comprises from 2 [-] to 40% by weight of one or more pigments, based on the overall weight of the coating composition.

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12. (Amended) [A] ~~The~~ process as claimed in [any of the preceding claims] claim 1, wherein the coating composition contains ~~from~~ 1[-] to 30% by weight of one or more fillers, based on the overall weight of the coating composition.

13. (Amended) [A] ~~The~~ process as claimed in [any of the preceding claims] claim 1, wherein the scratch-resistant coating is obtained by [designed as] a multicoat coating [system] ~~process, said multistep coating process~~ comprising the following steps:

- i. applying a [preferably pigmented] basecoat material to a substrate surface;
- ii. drying and/or crosslinking the basecoat film;
- iii. applying a topcoat material[, said topcoat material being a coating composition as defined in any of claims 1 to 12] obtained by the process as claimed in claim 1;
- iv. curing [the] ~~said topcoat material~~ by exposure to UV light under an inert gas atmosphere.

14. (Amended) [A] ~~The~~ process as claimed in [any of the preceding claims] claim 1, wherein the target substrate has a metallic surface.

Claims 15-17 (New).--

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